

Work Order ID 132654

Thursday, May 07, 2015 3:05:30 PM

132654

Page 1

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: AS350 Cable Cutter System
 Start Date: 6/1/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 6/6/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: MLS Date: MAY 11 2015 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.4000	B	* SP						MLS 15-06-11	
100	Document Control	0.00							DAS 02 9-89
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 646.4001								JUN 1 2015
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

JUN 1 2015
 JUN 1 2015
 JUN 1 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Page 2

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							DAS 02 9-89
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 646.4001								
	Location: <u>Sold</u>								JUN 18 2015
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									ML5 JUN 18 2015

ML5 JUN 18 2015

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
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Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Thursday, May 07, 2015 3:05:33 PM

Page 1

Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3301		Manufactured	No				Each	15.0000		1			

646 3301

Upper Cutter Assy

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CCK042

13

100125

3

123396

8

124729

2

CCK046

2

124258

2

**

DAS
27
9-89



646.3001

Manufactured No

Each

15.0000

1

646 3001

Lower Cutter Assy

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CCK045

15

124505

6

124733

7

92897

2

**

DAS
27
9-89



646.2910

Manufactured No

Each

18.0000

1

646 2910

Deflector

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CCK050

18

100811

2

123356

16

**

DAS
27
9-89

JUN 16 2015



DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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OTHER : _____					

Picklist Print

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Thursday, May 07, 2015 3:05:33 PM

Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

647.0112

Manufactured No

Each

231.0000

2

647 0112

Strut Bracket

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CCK109

231

112215

34

122245

19

122871

52

123318

34

M130388

92

DAS
27
9-89

DAS
9-89

647.7703

Manufactured No

Each

8.0000

2

647 7703

Strut Assembly

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CCK112

8

128211

3

130285

5

B130284

DAS
6
27-89
9-89

DAS
9-89

JUN 18 2015

NAS1149F0332P

Purchased No

Each

3,600.000

138

NAS1149F0332P

Washer

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

GA

222

122063

222

ST260a

2586

m128401

6

m131026

80

m131697

2500

st268

792

123900

286

m130325

420

m130388

86

DAS
JUN 18 2015
9-89

DAS
9-89

Thursday, May 07, 2015 3:05:33 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

Each

2,117.000

61

MS21042L3

Nut

DAS
27
9-89

DAS
6
9-89

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

FP001

420

M130922

420

GA

602

M131317

602

ST305

1095

116549

12

126333

49

M128754

2

M131624

32

M132123

1000

(6)

646.3110

Manufactured

No

Each

9.0000

1

646 3110

Channel

DAS
27
9-89

DAS
6
9-89

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck020

9

100124

2

126780

7

J

646.3710

Manufactured

No

Each

36.0000

1

646 3710

Doubler

DAS
27
9-89
JUN 16 2015

DAS
6
9-89

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CCK015

36

113729

6

127550

30

J

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

646.3210 Manufactured No

Each 10.0000 1

646 3210

Support

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck020

10

124388

1

126777

9

Each

28.0000

DAS
27
9-89



646.3713 Manufactured No

Each 28.0000 1

646 3713

Gusset

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck103

28

120631

28

Each

257.0000

DAS
27
9-89



MS24694-S51 Purchased No

Each 257.0000 5

MS24694-S51

Screw

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST289

257

m127432

20

m130928

237

Each

78.0000

DAS
27
9-89



AN3-13A Purchased No

Each 78.0000 1

AN3-13A

Bolt

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CA

5

m129682

5

GA

20

m127070

20

ST349

53

m123759

3

m131305

50

DAS
27
JUN 16 2015



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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER : _____			

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

AN3-4A Purchased No

Each 140.0000 10

AN3-4A

Bolt

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CA
m129682
ST350
m129702

108
108
32
32

MB237

DAS
27
9-89

CR3213-5-3 Purchased No

Each 50.0000 14

CR3213-5-3

Cherry Rivet

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST319
m127831
m130388

50
30
20

MB134

DAS
27
9-89

MS20470AD5-5.5 Purchased No

Each 295.0000 8

MS20470AD5-5 5

Rivet

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST310
123425

295
295

8

DAS
27
9-89

646.3711 Manufactured No

Each 48.0000 1

646 3711

Clip

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck103
120626
93929

48
46
2

DAS
27
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

646.3712

Manufactured No

Each 38.0000

1

646 3712

Clip

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck103

38

101119

2

120630

36

**

DAS
27
9-89

DAS
6
9-89

646.3811

Manufactured No

Each 35.0000

1

646 3811

Radius Block

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck104

35

106714

2

110717

18

122938

15

**

DAS
27
9-89

DAS
6
9-89

AN3-6A

Purchased No

Each 209.0000

2

AN3-6A

Bolt

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST338a

105

M130466

5

M131305

100

ST349

104

127044

4

M131957

100

**

DAS
27
9-89

JUN 16 2015

DAS
6
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
Root Cause		FAULT CATEGORY																							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : ☐																						
Misidentified ☐	☐	Past Due ☐																							

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Work Order ID: 132654

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

132654

646 4001

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

MS24694-S55

Purchased

No

Each

102.0000

1

MS24694-S55

Screw

DAS
02
9-89

X

DAS
38
9-89

Location

ST289

Loc Qty

102

Loc Code

**

DAS
27
9-89

DAS
27
9-89

646.3610

Manufactured

No

Each

15.0000

1

646 3610

Filler

DAS
02
9-89

DAS
38
9-89

Location

cck103

Loc Qty

9

Loc Code

**

DAS
27
9-89

DAS
27
9-89

102275

2

124514

7

k023a

6

127737

6

646.3714

Manufactured

No

Each

29.0000

1

646 3714

Gusset

DAS
02
9-89

DAS
38
9-89

Location

cck103

Loc Qty

29

Loc Code

**

DAS
27
9-89

DAS
27
9-89

120632

29

MS20470AD5-6

Purchased

No

Each

1,176.000

8

MS20470AD5-6

RIVET

DAS
02
9-89

DAS
38
9-89

Location

CCK004

Loc Qty

890

Loc Code

**

DAS
27
9-89

DAS
27
9-89

124089

890

ST309

286

105433

286

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-7

Purchased

No

Each

590.0000

3

MS20470AD5-7

Rivet

DAS
26
9-89

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST309

590

123425

590

3x

MS21047-3

Purchased

No

Each

102.0000

18

MS21047-3

Nut Plate

DAS
26
9-89

DAS
26
9-89

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST303

102

m130388

8

m131317

94

10x

* CCR264SS3-02

Purchased

No

Each

241.0000

36

CCR264SS3-02

Rivet, Cherry

DAS
26
9-89

DAS
26
9-89

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST321

241

M131340

91

M131803

150

36x 9x
27x

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
☐ OTHER : _____					

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

AN3-5A Purchased No

Each 602.0000 2

AN3-5A

Bolt

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CA	135	
m129682	135	
FP001	19	
124561	4	
m130325	15	
GA	448	
m129507	26	
m131420	422	

**

DAS
26
9-89

646.3715 Manufactured No

Each 24.0000 2

646 3715

Strut Doubler

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck103	24	
123469	7	
124376	9	
131050	8	

**

DAS
26
9-89

MS27039-1-12 Purchased No

Each 138.0000 6

MS27039-1-12

Screw

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST285	138	
m125654	12	
m128799	26	
m131317	100	

**

JUN 11 2015

DAS
26
9-89

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Shop Packet Print

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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OTHER : ☐																																																															

Picklist Print

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

646.3716 Manufactured No

Each 13.0000 1

646.3716

DAS
26
9-89

Gauge Bracket

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck103

13

122908

11

93198

2

1X

MS20426AD5-7

Purchased No

Each 98.0000 2

MS20426AD5-7

DAS
26
9-89

RIVET

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST312

98

101340

98

2x
2

MS24694-S54

Purchased No

Each 54.0000

MS24694-S54

DAS
26
9-89

SCREW

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST289

54

m130388

14

m131886

40

MS27039-1-21

Purchased No

Each 492.0000 4

MS27039-1-21

DAS
26
9-89

Screw

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST273A

395

m127904

395

ST284

97

124326

8

m126319

89

4X

JUN 11 2015

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WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Picklist Print

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-20

Purchased

No

Each

258.0000

2

MS27039-1-20

Screw

DAS
02
9-89

DAS
38

Location

Loc Qty

Loc Code

ST284

258

124326

258

2x

MS27039-1-19

Purchased

No

Each

466.0000

22

MS27039-1-19

Screw

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

GA

132

m124326

32

m127904

100

ST273A

249

m127904

249

ST284

85

125654

44

m127904

41

22x

646.3717

Manufactured

No

Each

28.0000

1

646 3717

Doubler

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck103

28

120633

28

1k

646.3718

Manufactured

No

Each

16.0000

2

646 3718

Custom Washer

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck104

16

101019

4

110639

12

2x

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Shop Packet Print

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WORK ORDER NON-CONFORMANCE / UPDATE

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Past Expiry Date ☐	Manufacturing Process ☐																																																																			
Misidentified ☐	Past Due ☐																																																																			
Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																																																																	
Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																																																																	
Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																	
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Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																	
		OTHER : ☐																																																																		

Picklist Print

Thursday, May 07, 2015 3:05:34 PM

Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

646.3719 Manufactured No

Each 51.0000 2

646 3719

DAS
26
9-89

Doubler

DAS
02
9-89
DAS
38
9-89

Location	Loc Qty	Loc Code
cck104	20	
123589	20	
cck126	31	
120634	31	

24

MS27039-1-10 Purchased No

Each 381.0000 2

MS27039-1-10

DAS
26
9-89

SCREW

DAS
02
9-89
DAS
38
9-89

Location	Loc Qty	Loc Code
CA	41	
m128635	41	
GA	239	
m129541	239	
ST285	101	
m123522	2	
m130358	85	
m130388	14	

2x

AN3-11A Purchased No

Each 440.0000 10

AN3-11A

DAS
26
9-89

Bolt

DAS
02
9-89
DAS
38
9-89

Location	Loc Qty	Loc Code
ST338a	440	
m125709	440	

10x

JUN 11 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																																													
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OTHER : ☐																																																																																																	

Picklist Print

Page 15

Thursday, May 07, 2015 3:05:34 PM

Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

DAS
26
9-89

600.0990 Purchased No

Each 62.0000 1

600 0990

MAGNABOND 6398 PART A

DAS
38
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

CA2

62

M130388

1

M129818

34

7/16/2015

M131589

27

2/11/2016

X (

600.0991 Purchased No

Each 67.0000 1

600 0991

MAGNOBOND 6398 PART B

DAS
38
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

CA2

62

m130388

1

M129818

33

7/16/2015

m131589

28

2/11/2016

X (

MF

5

130685

5

600.1012 Purchased No

Each 20.0000 1

600 1012

Sealant PR1425B2 (#654 sem)

DAS
38
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

cck017

18

m131364

18

10/30/2015

cck018

2

m129749

2

JUN 11 2015

DAS
02
9-89

Thursday, May 07, 2015 3:05:34 PM

Shop Packet Print

Page 15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
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Picklist Print

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

DAS
26
9-89

600.0129 Purchased No f 240.0000

**

8

m127920

DAS
26
9-89

600 0129

VHB TAPE 75935A651

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CCK095

240

m131311

240

600.1013 Purchased No Each 985.0000

**

5

600 1013

021200-3M TAPE PRIMER 94 PRIMER 24216

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CCK095

985

125154

10

m131145

975

6/15/2016

5x

646.3910 Manufactured No Each 92.0000

**

4

646 3910

Shim

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck023a

72

122951

60

124245

12

cck104

20

106729

8

126228

12

4X

DAS
26
9-89

DAS
26
9-89

JUN 11 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Thursday, May 07, 2015 3:05:34 PM

Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

646.3911

Manufactured No

Each

90.0000

1

646.3911

Shim

DAS
38
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

cck023

52

106863

2

126059

50

cck104

26

118824

8

126229

18

k023a

12

123075

12

Each

123.0000

4

646.3912

Manufactured No

646.3912

DAS
38
9-89

Shim

DAS
02
9-89

Location

Loc Qty

Loc Code

cck023a

60

123143

50

124501

10

cck104

63

103082

3

106927

10

123530

50

JUN 11 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
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Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :	
Misidentified ☐	Past Due ☐																																																														

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Page 18

Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

646.3913

Manufactured No

Each

128.0000

1

646.3913

Shim

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

cck023a

25

124108

25

cck023aq

82

126060

82

cck104

21

100136

4

126058

1

126231

16

**

DAS
26
9-89

AN3-12A

Purchased

No

Each

129.0000

2

AN3-12A

Bolt

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CA

69

m129682

69

GA

8

m130566

8

ST349

52

m126192

4

m130566

48

**

DAS
26
9-89

MS27039-1-16

Purchased

No

Each

148.0000

2

MS27039-1-16

Screw

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST285

148

m130224

40

m130388

8

m131317

100

**

DAS
26
9-89

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Page 18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

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Page 19

Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

650.9201 Manufactured No

Each 0.0000

650 9201 **DAS**
02

Eyelet Bracket Assembly

9-89

DAS
38

9-89

Purchased

No

Each 54.0000

2

B132814-62

AN44-5A

Eyebolt

DAS
02
9-89

DAS
38
9-89

Purchased

No

Each 54.0000

2

DAS
26
9-89

Location

Loc Qty

Loc Code

ST339

54

124241

25

m123900

13

m126193

10

m130388

6

Each

16.0000

2

m132317

DAS
26
9-89

AN665-34R

Purchased

No

AN665-34R

Clevis

DAS
02
9-89

DAS
38
9-89

Purchased

No

Each

148.0000

2

DAS
26
9-89

Location

Loc Qty

Loc Code

ST330

16

M130388

12

M131584

4

Each

148.0000

AN4C7A

Purchased

No

AN4C7A

BOLT

DAS
02
9-89

DAS
38
9-89

Purchased

No

Each

148.0000

Location

Loc Qty

Loc Code

ST312A

100

m127363

100

ST345

48

m128634

36

m130388

12

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Shop Packet Print

Page 19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																
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OTHER : ☐																																																																				

Picklist Print

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0432P

Purchased

No

Each

1,092.000

4

DAS
26
9-89

NAS1149F0432P

WASHER

DA
0
9
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST260a

1000

M131697

1000

st268

92

M128995

63

M130388

16

M131340

13

Each

2,297.000

2

DAS
26
9-89

MS21042L4

Purchased

No

MS21042L4

Locknut

DAS
38
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

FP001

42

m124231

42

GA

224

m127813

224

ST260a

62

m130799

56

m131803

6

ST305

1969

m128300

8

m130388

16

m130922

97

m131618

12

m132123

1836

JUN 11 2015

4X

2X

DAS
26
9-89

DAS
26
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
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Root Cause		FAULT CATEGORY																							
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Design ☐		Operator ☐		Bending ☐		Set-up ☐		Folio/Program ☐		Outside Dimensions ☐															
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐		Grain ☐		Over/Under tolerance ☐															
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Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐		Out of Sequence ☐		Part Moved ☐															
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐		Off-set ☐		Drawing ☐															
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐		Mislabeled ☐		Finish ☐															
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐		Fit/Function ☐		Misread ☐															
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐		Misaligned/off center ☐		Turning Sequence ☐															
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____																					
Misidentified ☐		Past Due ☐																							

Picklist Print

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Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

AN316C4R

Purchased

No

Each

57.0000

2

DAS
26
9-89

AN316C4R

NUT

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST331

57

124561

8

m127584

8

m127618

20

m127838

13

m130388

8

MS21042-3

MS21042L3

Purchased

No

Each

620.0000

2

DAS
26
9-89

MS21042-3

Nut / use MS21042L3

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

CA

501

M129682

501

ST305

119

M128770

10

M129541

15

M130388

94

MS27039-08-13

Purchased

No

Each

457.0000

2

JUN 11 2015

MS27039-08-13

Screw

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST273A

346

124326

346

ST281

111

123352

29

4067

69

M123185

1

M130388

12

DAS
26
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Thursday, May 07, 2015 3:05:34 PM

Page 22

Work Order ID: 132654

132654

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 6/1/2015

Required Date: 6/6/2015

Start Qty: 1.00

Required Qty: 1.00

* MS21042-08 MS21042L08 Purchased No

Each 39.0000

MS21042-08

USE MS21042L08

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

14

m130388

14

Each

3,556.000

4

**

DAS
26
9-89

m131697

DAS
26
9-89

NAS1149FN832P

Purchased

No

NAS1149FN832P

Washer

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST260a

1870

125268

1870

st268

1686

125268

737

M130388

949

JUN 11 2015

DAS
26
9-89

DAS
26
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																									
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Date :	Step #:	QTY Effective :		MRB (QSI042) Approval																																																																									
Description Work Order Deviation		Disposition		Completed By																																																																									
				Lead hand / Supervisor Approval Verification																																																																									
				QC / QA Coordinator Approval																																																																									
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APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04731

SHEET 1 OF 2

DWG NO. 646.4000

REV: A

PREPARED BY J. SOTO

DATE: 11/04/2014

EFFECT ON DWG.
☒ INC. ☐ UNINC.

DWG TITLE: AS350 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF.

NEXT ORDER

TRANSACTION CODES (TC):
A-ADD
R-REVISE
C-CREATE
D-DELETE

REASON: REVISED BOM. INCORPORATED ECN 03046 AND 03079.

SHOWN COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO APPROVAL

WITHOUT NOTICE
WORK ORDER

NO 132654_MLS

1505-11

76	A	601.2764	4	4	WASHER	NAS1149FN832P	
75	A	601.2973	2	2	LOCKNUT	MS21042-08	
74	A	601.2988	2	2	SCREW	MS27039-0813	
73	A	601.2943	2	2	LOCKNUT	MS21042-3	
72	A	601.3128	2	2	NUT	AN316C4R	
71	A	601.3209	2	2	LOCKNUT	MS21042L4	
70	A	601.2638	4	4	WASHER	NAS1149F0432P	
69	A	601.2669	2	2	BOLT	AN4C7A	
68	A	601.3119	2	2	CLEVIS	AN665-34R	
67	A	601.3121	2	2	EYE BOLT	AN44-57	
66	A	650.9201	2	2	EYE BRACKET ASSY		
51	R	601.2926	10	10	BOLT	AN3-11A	
12	R	601.1624	53	61	LOCKNUT	MS21042L3	
11	R	601.1607	120	138	WASHER	NAS1149F0332P	
8	R	647.7703	2	2	STRUT ASSY		
7	R	647.0112	2	2	STRUT BRACKET		
F/N	TC	PART NUMBER	.4003	.4001			
			QTY		DESCRIPTION	MATERIAL	SPECIFICATION

DOCUMENTS EFFECTED:

☐ MDL ☒ INSTALL INSTRUCTIONS ☒ ICA ☐ FMS ☒ BOM

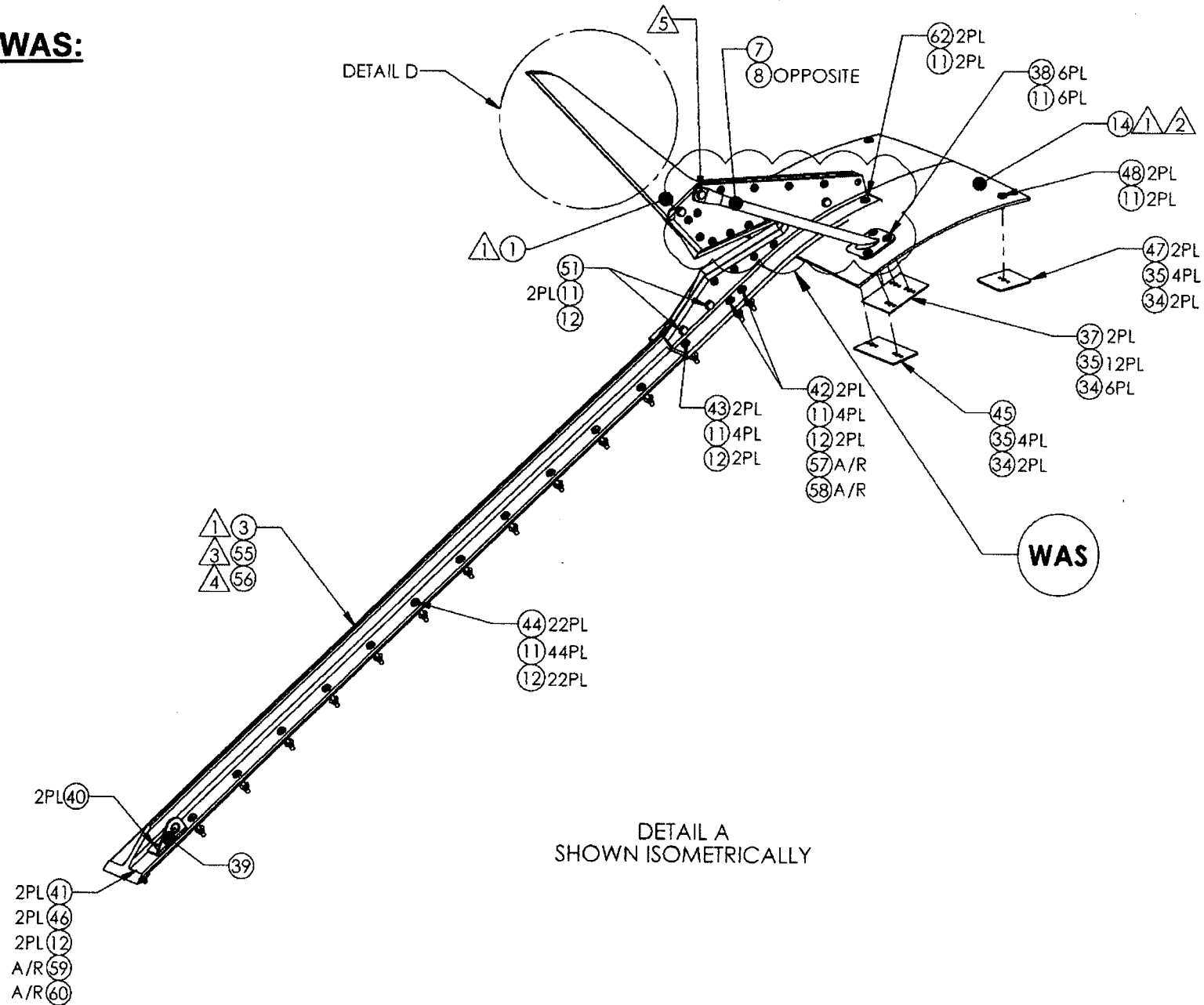
CHANGE CATEGORY

☐ MAJOR ☒ MINOR

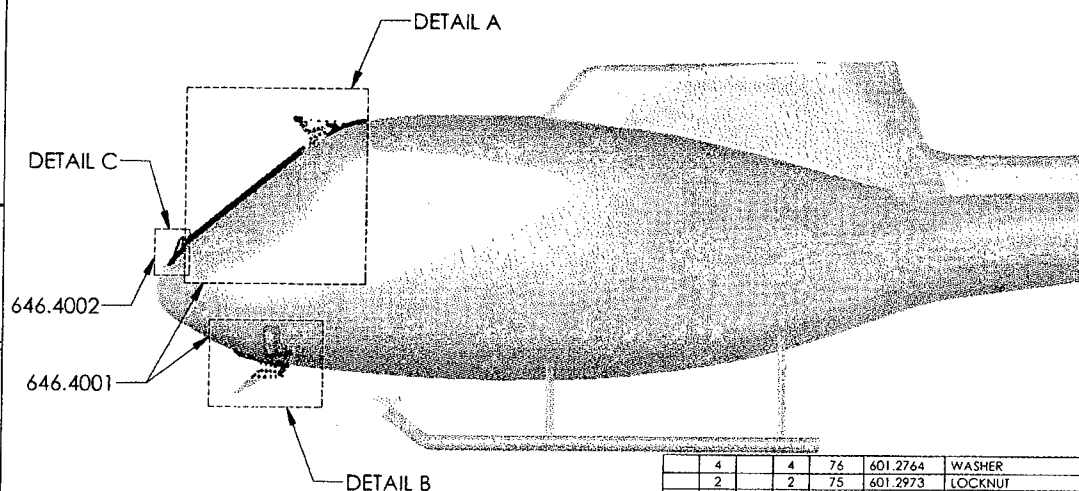
DER REVIEW REQUIRED

☐ YES ☒ NO

SHEET 2 WAS:



- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES
- 2 INSTALL F/N 14 WITH F/N 52 & 53
- 3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR : MCMMASTER-CARR P/N 75935A651
- 4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE
VENDOR: R.S. HUGHES P/N 021200-24216
- 5 REUSE FASTENERS FROM F/N 1
- 6 USE WASHERS AS REQUIRED AS SHIMS TO OBTAIN BEST FITMENT
- 7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ONTO F/N 1



	4	4	76	601.2764	WASHER	NAST149F0832 P
	2	2	75	601.2973	LOCKNUT	M521042-08
	2	2	74	601.2988	SCREW	M527039 0813
	2	2	73	601.2943	LOCKNUT	M521042-3
	2	2	72	601.3176	NUT	AN316C4R
	2	2	71	601.3209	LOCKNUT	M521042-4
	4	4	70	601.2638	WASHER	NAST149F0432 P
	2	2	69	601.2669	BOLT	AN6C7A
	2	2	68	601.3119	CLEVIS	AN665-34R
	2	2	67	601.3212	ENG BOLT	AN64-3A
	2	2	66	450.9201	EYE BRACKET ASSY	
REF	REF	REF	65	647.5701	GPS MOUNT KIT	
			64	601.3151	WASHER	NAST149F0833P
	6		63	601.2911	SCREW	M5246945353
	2		62	601.2637	SCREW	M527039 1-16
	2		61	601.2763	BOLT	AN3-12A
	1	1	60	646.3913	SHIM	
	4	4	59	646.3912	SHIM	
	1	1	58	646.3911	SHIM	
	4	4	57	646.3910	SHIM	
	5	5	56	600.1013	PRIMER	
4004	4003	4002	4001	FIND #	PART #	
					DESCRIPTION	MAT'L
						SPEC

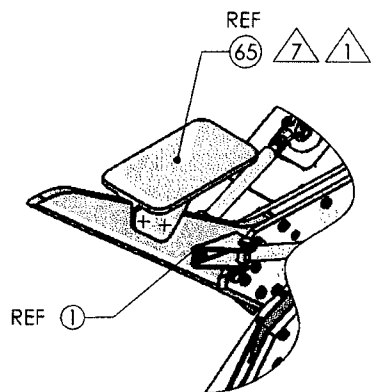
						REV-GONG			DATE	APPROVED
						REV.	DESCRIPTION			
						A	INCORPORATED ECHS 02199, 02211, 02719 & 02745		07/08/2010	P. BRAVO
						B	INCORPORATED ECHS 03046, 03079 & 04731		11/04/2014	6P P. BRAVO

	8 FT		8 FT		55	600.0129	VH8 TAPE	
	1	1	1		54	600.1012	SEALANT	PR-142S CLASS B
	1		1		53	600.0991	MAGNOBOND 6398 PART B	
	1		1		52	600.0990	MAGNOBOND 6398 PART A	
	10		10		51	601.2826	BOLT	AN3-11A
			2		50	646.3814	WIPER BRACKET	
			2		49	601.2910	SCREW	MS27039-1-18
2			2		48	601.1365	SCREW	MS27039-1-10
2			2		47	646.3719	DOUBLER	
	2		2		46	646.3718	CUSTOM WASHER	
1			1		45	646.3717	DOUBLER	
	22	2	22		44	601.1948	SCREW	MS27039-1-19
	2		2		43	601.1952	SCREW	MS27039-1-20
4			4		42	601.1956	SCREW	MS27039-1-21
2			2		41	601.2829	SCREW	MS24694554
2			2		40	601.2831	RIVET	MS20476ADS-7
1			1		39	646.3716	GAUGE BRACKET	
6			6		38	601.1953	SCREW	MS27039-1-12
2			2		37	646.3715	STRUT DOUBLER	
	2		2		36	601.2824	BOLT	ATN3-5A
36			36		35	601.2277	RIVET	CCR2MSS-3-02
18			18		34	600.0795	NUTPLATE	MS21047-3
3			3		33	601.2565	RIVET	MS20476ADS-7
1			1		32	646.3813	STRUT BRACKET	
4			4		31	601.2822	BOLT	AN3-3A
2			2		30	646.3812	GUSSET BRACKET	
8			8		29	601.2564	RIVET	MS20476ADS-6
1			1		28	646.3714	GUSSET	
	1		1		27	646.3610	FILLER	
	2		2		26	601.2830	SCREW	MS24694555
	1		1		25	601.2825	BOLT	AN3-6A
	1		1		24	646.3811	RADIUS BLOCK	
	1		1		23	646.3712	CLIP	
			1		22	646.3711	CLIP	
8			8		21	601.2832	RIVET	MS20476ADS-5.5
14			14		20	601.2020	RIVET	CR3213-5-3
10			10		19	601.2823	BOLT	AN3-4A
	1		1		18	601.2827	BOLT	AN3-13A
	5		5		17	601.2912	SCREW	MS24694551
1					16	646.3713	GUSSET	
1					15	646.3210	SUPPORT	
1					14	646.3710	DOUBLER	
					13	646.3110	CHANNEL	
8	53	6	61	12	601.1624	LOCKNUT	MS21042L3	
18	120	16	138	11	601.1607	WASHER	NAS1149F0322P	
				10	646.3410	LH WIPER DEFLECTOR		
				9	646.3411	RH WIPER DEFLECTOR		
	2		2	8	647.7703	STRUT ASSY		
	2		2	7	647.0112	STRUT BRACKET		
			1	6	646.3511	STRUT		
			1	5	646.3510	STRUT		
2			2	4	646.3810	BRACKET		
	1		1	3	646.2910	DEFLECTOR		
	1		1	2	646.3001	LOWER CUTTER ASSY		
	1		1	1	646.3301	UPPER CUTTER ASSY		
X					646.4004	FIXED PROVISIONS KIT		
	X				646.4003	CABLE CUTTERS KIT WITHOUT KIT		
		X			646.4002	PROBING ASS350 WIPER DEFLECTOR KIT		
			X		646.4001	ASS350 CABLE CUTTERS KIT		
4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.

QTY		NEXT ASSY (S)		PARTS LIST	
				APICAL INDUSTRIES	
				2608 TEMPLE HEIGHTS DR.	
				OCEANSIDE, CA 92056-3512 (760)724-5300	
				ASS350 CABLE CUTTERS KIT	
				SEE GAGE CODE DWG. NO.	
				B 07MA6 646.4000	
				SCALE NONE 1 SHEET 1 OF 4	

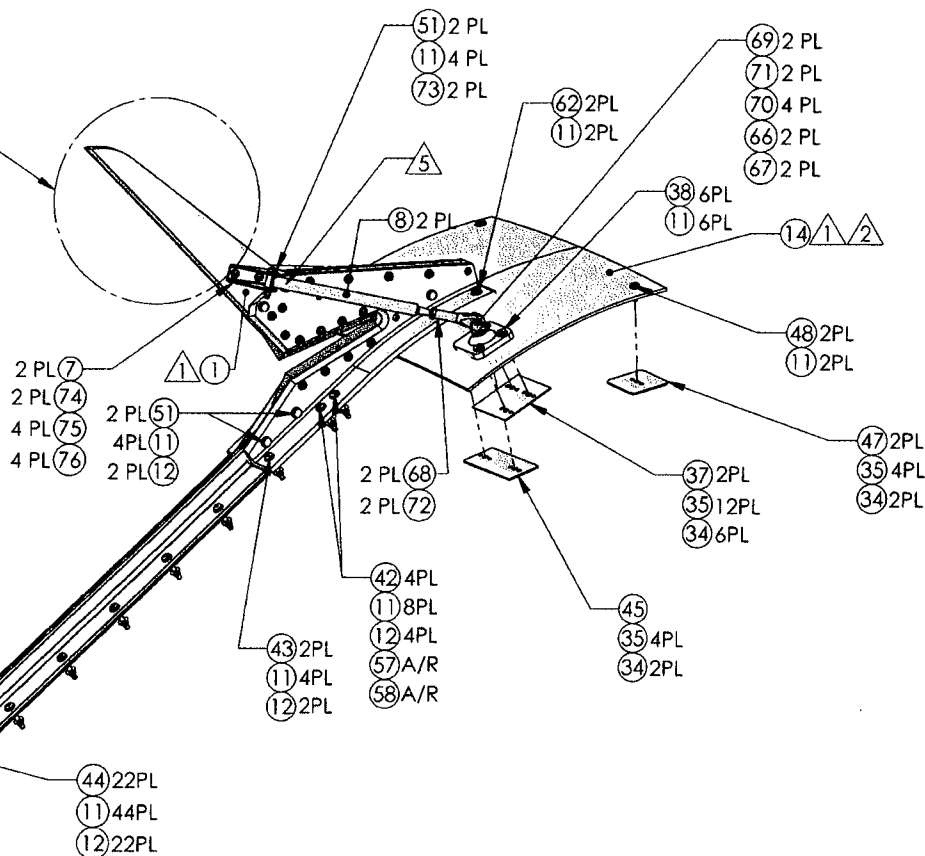
ORIGINAL DATA: 04-27-08	DATE: 08-27-08
DRAWN BY: S. HUNT	CHECKED BY: P. BRAVO
DESIGNED BY: P. BRAVO	APPROVED BY: P. BRAVO
CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	
1) PLACE DECIMALS: 101	
2) PLACE DECIMALS: 1005	
ANGLES: 5	

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DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION

DETAIL D



DETAIL A
SHOWN ISOMETRICALLY

ORIGINAL DATE 1-20-01		DESIGNER S. HUFF	
DRAWN BY S. HUFF		P. BRAYO	
DRAWING APPROVAL P. BRAYO		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SIZE B	QTY 07M26
DWG. NO. 646.4000		REV. B	SCALE NONE
SHEET 2 OF 4			

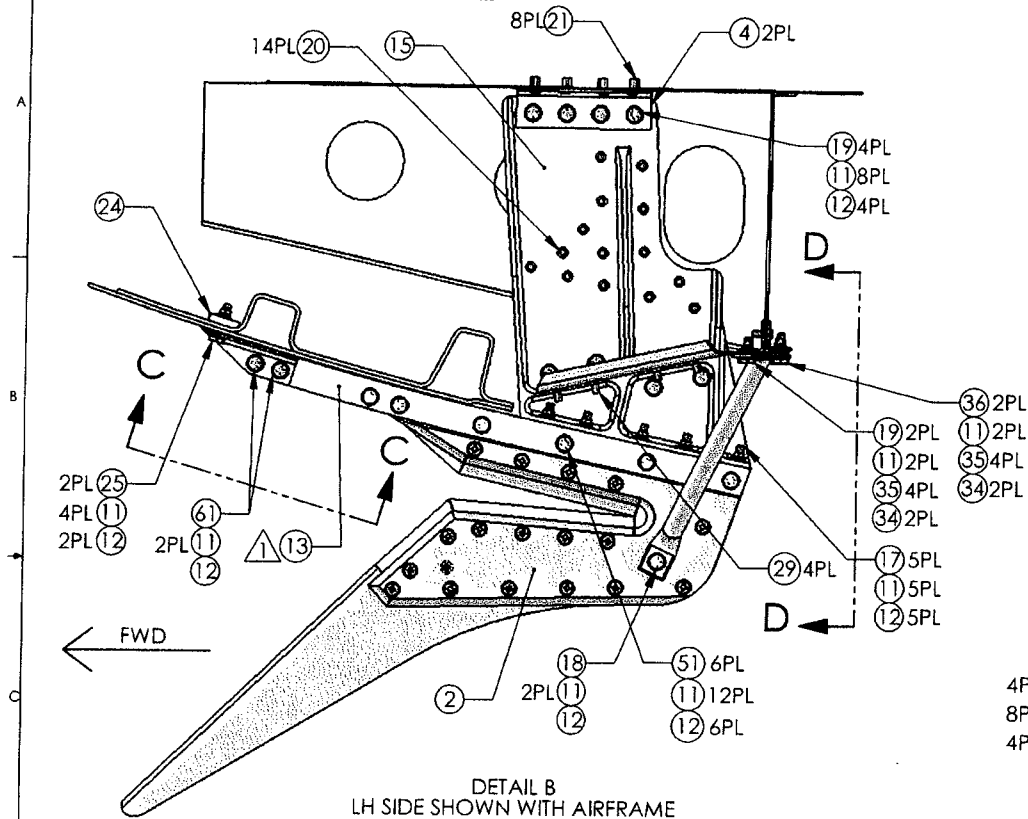
APICAL INDUSTRIES

2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

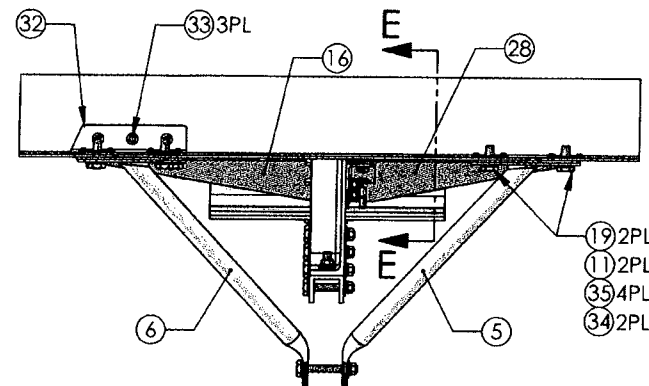
AS350 CABLE CUTTERS KIT

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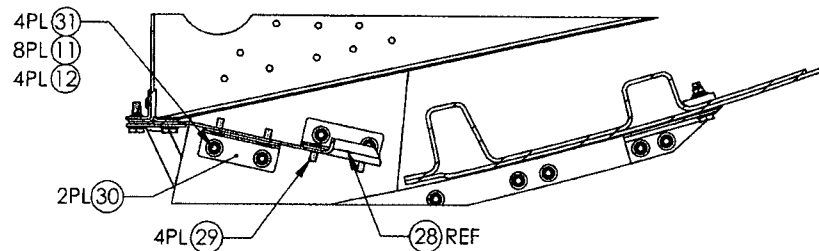
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



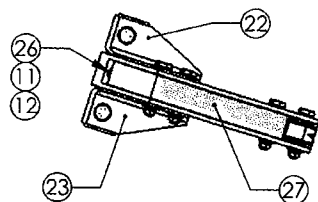
DETAIL B
LH SIDE SHOWN WITH AIRFRAME



SECTION D-D
CUTTER HIDDEN FOR CLARITY



SECTION E-E

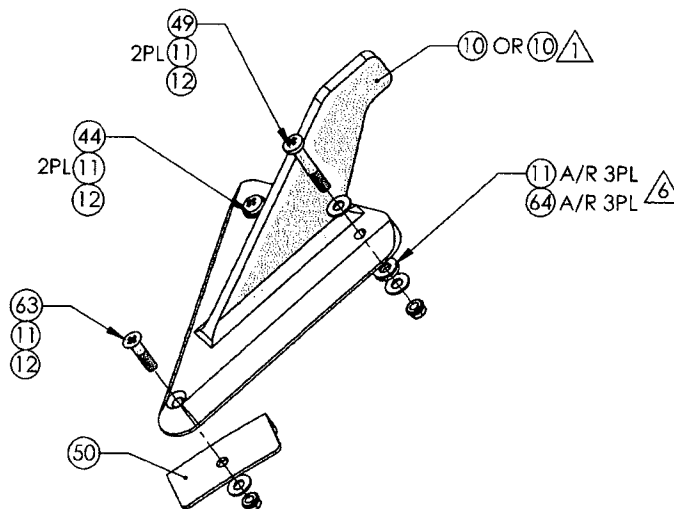


SECTION C-C

ORIGINAL DATE 08-07-00		APICAL INDUSTRIES	
DRAWN BY S. HART		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY P. BRAVO		AS350 CABLE CUTTERS KIT	
DRAWING APPROVAL P. BRAVO		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°	
SHEET	CAGE CODE	DWG. NO.	REV.
8	07M26	646.4000	B
SCALE NONE		SHEET 3 OF 4	

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THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE 10-01-10 08-27-08			
DESIGNED BY S. HUI	DESIGNED BY P. BRAYO	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAYO	DRAWING APPROVAL P. BRAYO	AS350 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		BILL CODE CODE B 07M26	DWG. NO. 646.4000
SCALE NONE		REV B	
SHEET 4 OF 4		SHEET 4 OF 4	

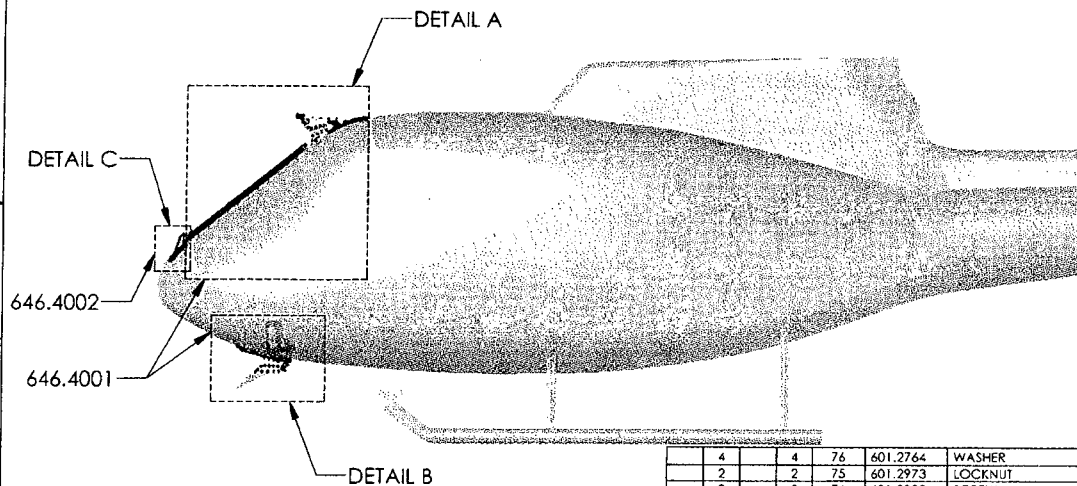
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NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES
- 2 INSTALL F/N 14 WITH F/N 52 & 53
- 3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR : MCMMASTER-CARR P/N 75935A651
- 4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE
VENDOR: R.S. HUGHES P/N 021200-24216
- 5 REUSE FASTENERS FROM F/N 1
- 6 USE WASHERS AS REQUIRED AS SHIMS TO OBTAIN BEST FITMENT
- 7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ONTO F/N 1

REFERENCE ONLY

DAS
02
9-89



4	4	76	601.2764	WASHER	NAS12991B32
2	2	75	601.2973	LOCKNUT	MS21042-08
2	2	74	601.2988	SCREW	MS27039-0813
2	2	73	601.2943	LOCKNUT	MS21042-3
2	2	72	601.3128	NUT	AN314C4R
2	2	71	601.3209	LOCKNUT	MS21042L4
4	4	70	601.2638	WASHER	NAS12991B32
2	2	69	601.2669	BOLT	ANAC7A
2	2	68	601.3119	CLEVIS	A1665-34R
2	2	67	601.3121	EYE BOLT	AN44-5A
2	2	66	650.9201	EYE BRACKET ASSY	
REF	REF	REF	65	647.5701	GPS MOUNT KIT
	6		64	601.3151	WASHER
	2		63	601.2911	SCREW
2	2	62	601.2637	SCREW	MS27039-11-16
2	2	61	601.2763	BOLT	AN3-12A
1	1	60	646.3913	SHIM	
4	4	59	646.3912	SHIM	
1	1	58	646.3911	SHIM	
4	4	57	646.3910	SHIM	
5	5	56	600.1013	PRIMER	

8 FT		8 FT	55	600.0129	VHB TAPE		
1	1	1	54	600.1012	SEALANT	PR-108 CLAS E	
1	1	1	53	600.0991	MAGNABOND 4398 PART B	AN3-11A	
1	1	1	52	600.0990	MAGNABOND 4398 PART A		
10		10	51	601.2826	BOLT	AK3-11A	
		2	50	646.3814	WIPER BRACKET		
		2	49	601.2910	SCREW	MS27039-1-18	
2		2	48	601.1365	SCREW	MS27039-1-10	
2		2	47	646.3719	DOUBLER		
		2	46	646.3718	CUSTOM WASHER		
1		1	45	646.3717	DOUBLER		
22	2	22	44	601.1948	SCREW	MS27039-1-19	
2		2	43	601.1952	SCREW	MS27039-1-20	
4		4	42	601.1956	SCREW	MS27039-1-21	
2		2	41	601.2829	SCREW	MS2469455A	
2		2	40	601.2831	RIVET	MS2046ADS-7	
1		1	39	646.3716	G AUGE BRACKET		
6		6	38	601.1953	SCREW	MS27039-1-12	
2		2	37	646.3715	STRUT DOUBLER		
		2	36	601.2824	BOLT	AN3-5A	
36		36	35	601.2277	RIVET	CCP1445-3-07	
18		18	34	600.0795	NUTPLATE	MS21047-3	
3		3	33	601.2565	RIVET	MS20470ADS-7	
1		1	32	646.3813	STRUT BRACKET		
4		4	31	601.2822	BOLT	AN3-3A	
2		2	30	646.3812	GUSSET BRACKET		
8		8	29	601.2564	RIVET	MS20470ADS-6	
1		1	28	646.3714	GUSSET		
1		1	27	646.3610	FILLER		
1		1	26	601.2830	SCREW	MS24694555	
2		2	25	601.2825	BOLT	AN3-6A	
1		1	24	646.3811	RADIUS BLOCK		
1		1	23	646.3712	CLIP		
1		1	22	646.3711	CLIP		
8		8	21	601.2832	RIVET	MS20470ADS-5.5	
14		14	20	601.2020	RIVET	CR3213-5.3	
10		10	19	601.2823	BOLT	AN3-4A	
1		1	18	601.2827	BOLT	AN3-13A	
5		5	17	601.2912	SCREW	MS24694551	
1		1	16	646.3713	GUSSET		
1		1	15	646.3210	SUPPORT		
1		1	14	646.3710	DOUBLER		
1		1	13	646.3110	CHANNEL		
8	53	6	61	12	601.1624	LOCKNUT	MS21042L3
18	120	16	138	11	601.1607	WASHER	NAS114910329P
				10	646.3410	LH WIPER DEFLECTOR	
				9	646.3411	RH WIPER DEFLECTOR	
				8	647.7703	STRUT ASSY	
				7	647.0112	STRUT BRACKET	
				6	646.3511	STRUT	
				5	646.3510	STRUT	
				4	646.3810	BRACKET	
				3	646.2910	DEFLECTOR	
				2	646.3301	LOWER CUTTER ASSY	
				1	646.3301	UPPER CUTTER ASSY	
X					646.4004	FIXED PROVISIONS KIT	
X					646.4003	CABLE CUTTER KIT WITH FOUR FIBER PROVISIONS	
					646.4002	AS350 WIPER DEFLECTOR KIT	
					646.4001	AS350 CABLE CUTTERS KIT	

QTY
NEXT ASSY (S)

ORIGINAL DATE
08-27-08
DRAWN BY
P. BRAVO
CHECKED BY
P. BRAVO
APPROVAL
DATE
08-27-08
CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
3 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.2°

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

AS350 CABLE CUTTERS KIT

SCALE: NONE
SHEET 1 OF 4